1009-05-217 **Hugh R. Thomas*** (hugh@math.unb.ca), Department of Mathematics and Statistics, University of New Brunswick, Fredericton, NB E3B 5A3, Canada, and **Colin Ingalls** (colin@math.unb.ca).

The lattice of noncrossing partitions via representation theory of quivers.

Associated to any finite reflection group, there is a combinatorial object called the lattice of noncrossing partitions. In type A, these are just the classical noncrossing partitions. In this talk, I will discuss a new approach to the lattice of noncrossing partitions for crystallographic reflection groups, using the representation theory of quivers. This approach yields a new proof that the noncrossing partitions do indeed form lattices for these groups (a result proved in a type-free way for the first time earlier this year by Brady and Watt), and also clarifies connections between noncrossing partitions, clusters, and other related objects. (Received August 16, 2005)